

FISHHUN, WILLOW CREEK, BENTON LAKE
NATIONAL WILDLIFE REFUGES

MONTANA

REFUGE PERSONNEL

John E. Schwartz, Supt. of Refuges, Moiese, Montana

Kenneth B. Jolley, Refuge Manager, Charlo, Montana

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

Charlo, Montana

PISTON, WILLOW CREEK, HINTON LAKE
NATIONAL WILDLIFE REFUGES
Narrative Report
January 1 - April 30, 1961

TABLE OF CONTENTS

GENERAL

Weather Conditions	1
Water Conditions	1

WILDLIFE

Migratory Birds	3
Populations and Behavior	3
Food and Cover	3
Upland Game Birds	4
Populations and Behavior	4
Food and Cover	4
Big Game Animals	4
Populations and Behavior	4
Food and Cover	4
Fur Animals, Predators and Rodents	4
Fish	5

<u>REFUGE DEVELOPMENT AND MAINTENANCE</u>	5
---	---

<u>ECONOMIC USE OF THE REFUGE</u>	5
---	---

<u>APPLIED RESEARCH</u>	6
-------------------------------	---

FISHKUN, WILLOW CREEK, BENTON LAKE
NATIONAL WILDLIFE REFUGES
NARRATIVE REPORT
January 1 - April 30, 1951

I. GENERAL

A. Water Conditions

Weather reports sent each month from the office of the County Agent in Choteau are the only source of weather information for the Fishkun, Willow Creek and Benton Lake areas. Weather conditions at these refuges are usually similar to those at Choteau.

Following is a summary of weather data for the period:

	<u>1951</u>			
	<u>Snowfall</u>	<u>Prec.</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
January	0.05	—	49	-26
February	9.00	.47	62	-21
March	6.80	.49	62	-35
April	0.80	.80	70	-4
Totals	16.65	1.76		

Average for Preceding Six Years

	<u>Snowfall</u>	<u>Prec.</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
January	4.1	.29	53.5	-19.5
February	3.9	.45	57.8	-15.8
March	4.5	.48	61.0	-13.8
April	3.2	.37	74.5	9.7

B. Water Conditions

Gauge readings for Fishkun and Willow Creek Reservoirs are mailed from the office of the Greenfields Irrigations District in Fairfield. These two reservoirs are units of the Sun River Irrigation Project, and the Fish and Wildlife Service has no jurisdiction over water management.

Water elevation changes in Pisham and Willow Creek Reservoirs are summarized below:

Pisham

<u>Crest of Spillway - 4374</u>				<u>Bottom of Outlet - 4342</u>		
<u>End of:</u>	<u>1951</u>	<u>1950</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>
January	4361.9	4362.0	4359.8	4363.3	4360.5	4364.7
February	4361.8	4361.8	4359.6	4363.5	4360.5	4364.8
March	4361.8	4361.7	4359.4	4363.5	4360.5	4364.8
April	4361.9	4366.1	4366.7	4363.3	4360.5	4365.5

Willow Creek

<u>Crest of Spillway - 4142</u>				<u>Bottom of Outlet - 4085</u>		
<u>End of:</u>	<u>1951</u>	<u>1950</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>
January	4135.4	4106.9	4131.1	4129.7	4126.0	4123.2
February	4135.9	4108.7	4131.5	4130.0	4126.8	4123.6
March	4137.5	4110.9	4132.3	4130.4	4122.5	4124.1
April	4138.3	4115.9	4133.5	4132.0	4130.2	4124.6

Water levels at Pisham have been about normal for the period, but at Willow Creek have been above normal. During the January-April period of 1950 Willow Creek elevations were abnormally low.

Because of a greater than average spring snowfall and good runoff, Benton Lake received more water this spring than it has in several years. When the refuge was visited late in April, more than 100 acres were flooded, and a considerably larger area was marshy. Several potholes also were filled with water. An abundance of water in Benton Lake is beneficial not only in that it makes the area more attractive to waterfowl, but also because it encourages a better distribution of grazing.

There have been several proposals to reflood Benton Lake by bringing in water either from Muddy Creek, north of the refuge, or from Freegeout Lake, which is located near Fairfield. Either plan apparently is possible from an engineering standpoint. Sportsmen in the area are, of course, very much interested in such a proposal, and the ranchers around the refuge feel that water in the lake would be an advantage from an agricultural point of view.

Actually, there is little doubt but that the reflooding of

Benton Lake would make that area a much better waterfowl refuge than either Fishum or Willow Creek. Benton Lake is larger than either of the others. Flooding would create extensive shallow water areas and marshes, which are lacking at Fishum and Willow Creek, and because of the service controlled grazing program at Benton Lake, there is excellent cover over most of the refuge.

II. WILDLIFE

A. Migratory Birds

1. Populations and Behavior

When these areas were visited in April, there were about 10 Canada geese and not more than 200 ducks on Willow Creek Refuge. Species observed were mallards, baldpates and pintails. There were no geese on Fishum and very few ducks on the main reservoir. However, there were perhaps 200 mallards, baldpates and pintails, plus a few mergansers on the potholes below the dam.

At Benton Lake there were about 5,000 ducks, and ranchers reported that there had been a larger number on the refuge earlier in the season. Most of the ducks seen were mallards and pintails. A pair of buffleheads was seen on one of the two stock watering ponds on the south side of the refuge.

A few ducks always nest at Benton Lake, even when there is little water. There should be an excellent hatch of ducks there this season.

2. Food and Cover

Food and cover conditions are poor at Fishum and Willow Creek. There is little aquatic vegetation and the shorelines are steep. Grazing is not regulated by the Fish and Wildlife Service and cattle graze right down to the water's edge.

At Willow Creek a nesting area has been partially fenced off to exclude grazing. This area is somewhat marshy later in the season, and there will be a good growth of nesting cover.

At Benton Lake heavy growths of upland grasses provide excellent nesting cover, and ducks find feed in and adjacent to the newly-formed lake. Wheat is grown extensively all around the refuge and the fields provide considerable waste grain as well as green browse. Ranchers report that they frequently find ducks nesting in the wheat fields.

B. Upland Game Birds

1. Populations and Behavior

Sharptailed grouse are present on Benton Lake Refuge, but in unknown numbers. Ring-necked pheasants are common in the area surrounding the refuge, but the refuge itself does not support very many of these birds.

No upland game birds have been seen on either Pishkun or Willow Creek.

2. Food and Cover

Upland game birds should find an abundance of food in the grain fields around Benton Lake Refuge. Cover on Benton Lake is good as far as the sharp-tailed grouse are concerned. Cover conditions are less satisfactory at Pishkun and Willow Creek, and at these two refuges food is somewhat scarce. Most of the wheat ranches are several miles from Pishkun and Willow Creek.

C. Big Game Animals

1. Populations and Behavior

No big game animals have been seen on either Pishkun or Willow Creek Refuges in recent years, although it is reported that antelope, and even elk, occasionally appear on these areas.

Two antelope were seen at Benton Lake in April. These animals are seen quite frequently by ranchers near the refuge. Mule deer also occur occasionally on Benton Lake Refuge.

2. Food and Cover

Food conditions for antelope are excellent on Benton Lake and fair at Pishkun and Willow Creek. There is no browse for deer on any of the three refuges.

D. Fur Animals, Predators and Rodents

White-tailed jack rabbits are seen regularly on all three refuges, but they do not appear to be very abundant. One skunk was seen at Benton Lake during the last visit to that area. Undoubtedly skunks occur at all three refuges, as do a few badgers and coyotes. Richardson's ground squirrels seem to be decreasing at Benton Lake, according to ranchers who graze cattle there. Few ground squirrels are seen at Pishkun or Willow Creek.

F. Fish

Fish are present in Fisham and Willow Creek Reservoirs, but little is known of the species or abundance. Trout and perch are frequently taken during the fishing season.

III. REFUGE DEVELOPMENT AND MAINTENANCE

No development nor maintenance work has been done at Fisham or Willow Creek this period. At Benton Lake the large recognition sign reconditioned at Ninepipe was set up again. The heavy posts and the cross member supporting the sign were worked down to clear wood with a draw knife and treated with log wood oil.

IV. ECONOMIC USE OF THE REFUGE

At Benton Lake one farming permit and four grazing permits were in effect during the January-April period:

Farming Permit

<u>Permittee</u>	<u>Acreage Utilized</u>	<u>Period of Use</u>	<u>Rate</u>
O. M. Olson	40	3/1/50 - 2/28/51 3/1/51 - 2/28/52	.50 acre

Grazing Permits

<u>Permittee</u>	<u>Acreage Utilized</u>	<u>A.U.M.</u>	<u>Period of Use</u>	<u>Rate</u>
Carl Hinderager	147	96	9/16/50 - 9/15/51	.10 acre
John Hinkle	1,100	660	11/1/50 - 10/31/51	.10 acre
Wm. Neuman	280	168	1/1/51 - 12/31/51	.10 acre
Chas. Prinzing	280	168	9/1/50 - 8/31/51	.10 acre

V. APPLIED RESEARCH

Refuge Management Biologist Watson E. Beed visited Pishkun and Willow Creek Refuges April 11, 1951, and Benton Lake Refuge April 12, 1951. Mr. Beed's reports concerning these refuges are as follows:

PISHKUN AND WILLOW CREEK NATIONAL WILDLIFE REFUGES

Augusta, Montana

Kenneth B. Jolley, Refuge Manager

Pishkun and Willow Creek Refuges were visited April 11, 1951.

About two thirds of the ice had melted in Willow Creek reservoir.

About 500 redheads and canvasback ducks were using the refuge. A few American mergansers, mallards and pintails were also seen. Fifty Canada geese and four whistling swan were resting on a small arm of the reservoir.

Like most of our easement refuges the lands surrounding the reservoir were overgrazed leaving no nesting cover whatever.

Most of the ice had melted in Pishkun reservoir. The waterfowl population was low. About 150 American mergansers were present and a very few scaup and canvasback were seen. The ditch leading from the reservoir was being used by a few dozen mallards and pintails.

The watermaster was working on the dam with a crew and he brought up the subject of using boats for fishing on the reservoir. He was very much opposed to the use of boats but so far as wildlife is concerned, summer boating would make little or no difference.

s/Watson E. Beed
Watson E. Beed
Refuge Management Biologist

BENTON LAKE NATIONAL WILDLIFE REFUGE

Great Falls, Montana

Kenneth B. Jolley, Refuge Manager

Benton Lake Refuge was visited April 12, 1951. There was no water in the lake and only very little in the creek. No waterfowl

were seen. If some provision were made for a dependable water supply this would be one of the best refuges in our system. A flooded area only a few miles from Benton Lake was literally teeming with mallards, pintails and baldpates.

The conditions of the ranges was excellent. Western wheatgrass is slowly crowding out the annual weeds in the lake bed proper. Unless flooded again this area will eventually become a wheatgrass meadow.

The outlet ditch had some water in it and when looking it over I discovered what at first glance was a huge artesian well coming up in the water. It proved to be a large break in the gas main where it passed under the ditch. The break was reported to refuge neighbor Hinkle who reported it to the gas company.

s/Watson E. Beed
Watson E. Beed
Refuge Management Biologist

Mr. Beed visited these three refuges only the one time during the period.

Respectfully Submitted:

Kenneth B. Jolley
Refuge Manager

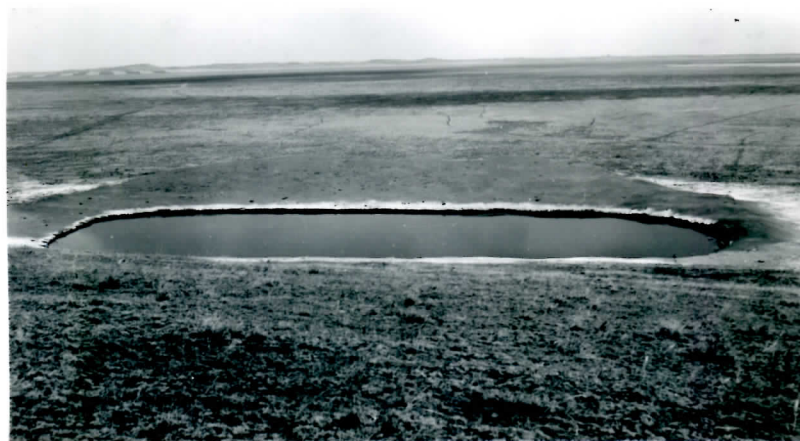
Completed May 11, 1951

Approved _____

John E. Schwartz
Supt. of Refuges

Approved _____

Regional Director



Stock watering ponds at Denton Lake Refuge



Pair of buffleheads taking off from stock watering pond
Benton Lake



Lake formed by spring runoff
Benton Lake